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EXAMINER

MITCHELL, JASON D

ART UNIT	PAPER NUMBER
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2193

DATE MAILED: 08/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/005,140

Applicant(s)

KLIEWE, JOHN

Examiner

Jason Mitchell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-10,12-16 and 18-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-10,12-16 and 18-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to remarks filed on 5/23/05.
2. As requested by the applicant claims 1, 8 and 14 have been amended, and claim 21 has been added. Claims 1-3, 5-10, 12-16 and 18-21 are pending in this case.

Response to Arguments

3. **Applicant's arguments on pp. 12-14 of the remarks filed 5/23/05, regarding the 35 USC 103(a) rejection of claims 1, 7-8, 14 and 20 over Isip in view of Rosenzweig et al. have been fully considered but they are not persuasive.**

On pg. 13, Applicant states:

In particular, Applicant asserts that the Office Action fails to view Applicant's invention as a "whole."

Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

On pg. 14, Applicant states:

Applicant asserts that the rejection combines portions of references based upon knowledge gleaned only from Applicant's disclosure in contravention of MPEP 2145.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning.

But so long as it takes into account only knowledge which was within the level of

ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

4. Applicant's arguments on pp. 15-17 filed 5/23/05, regarding claims 1, 8 and 14 have been fully considered but they are not persuasive.

In the paragraph bridging pp. 15 and 16, Applicant states:

Again, Isip teaches either applying SPUFI code to an actual database or applying SPUFI code to an exception table, but never teaches or suggest applying SPFI code to an erroneous (copied) database. ... Therefore, the Office Action uses impermissible hindsight in order to combine Rosenzweig with Isip because the combination contradicts Isip's teaching.

Examiner respectfully disagrees. As stated in the rejection, Isip teaches the use of an 'Exception Table' to 'verify that proper corrections have been made' (Isip col. 15, lines 21-25) thus protecting the data in the 'actual database'. Rosenzweig teaches an alternate method for protecting this data (col. 5, line 65-col. 6. line 3).

While Examiner acknowledges that Isip prefers the use of an 'exception table', MPEP 2123 states, "Disclosed examples and preferred embodiments do not constitute a teaching away from a broader disclosure or non-preferred embodiments".

Consequently, Examiner maintains the position that, if system resources were available to handle the extra processing and storage requirements, it would have been obvious to a person of ordinary skill in the art at the time of the invention to substitute Rosenzweig's 'backup database' for Isip's 'exception table'.

Applicant goes on to state:

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Furthermore, regarding the fifth element of claim 1, when the testing is deemed successful on the erroneous database, Applicant uses the SPUFI code to update the actual database. In contrast, Isip does not use the SPUFI code again to update an actual database, but merely replaces rows in the actual database with rows in the exception table that have been changed by the SPUFI code. (emphasis in original)

Examiner respectfully disagrees. In col. 14, lines 10-22 Isip discloses 'the customer updates the output file 800 as necessary and then executes the output file to repair the constraint violations' clearly disclosing using the SPUFI code to update the actual database.

Accordingly the rejections of independent claims 1, 8 and 14, as well as the rejections of dependent claims 7 and 20 are maintained.

Applicant's arguments on pp. 17-18 filed 5/23/05, regarding claims 5, 12 and 18 have been fully considered but they are not persuasive.

In the paragraph bridging pp. 17 and 18 Applicant states:

In contrast, and as discussed with the Examiner, Mica teaches copying an entire database and never teaches or suggest copying portions of a database. As such, Mica never teaches or suggests determining whether testing was successful by comparing the number of database records that actually changed with a number of database records that should change as claimed by Applicant.

Examiner respectfully disagrees. Mica is not relied upon to teach 'copying portions of a database', in fact no such limitation exists in the claim. In contrast and as discussed with Applicant's representative, and as noted in the action, Mica simply teaches testing for success of a database action by comparing an actual count with an expected count (col. 10, lines 6-10 'a number ... for indicating whether the entire record set has been read ... in conjunction with a pseudo count field').

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Accordingly the rejections of claims 5, 12 and 18 are maintained.

Applicant's arguments on pp. 18-19 filed 5/23/05, regarding claims 6, 13 and 19 have been fully considered but they are not persuasive.

On pg. 19 Applicant states:

Applicant restores the actual database if the SPUIFI code does not correctly change the database. In contrast and as discussed with the Examiner, Brodersen never teaches such limitations. Rather, Brodersen commits a write operation to a database in the event that the database is rolled back **due to a software or hardware failure.** (emphasis in original)

Examiner respectfully disagrees. It is Examiner's position that one of skill in the art would recognize the equivalence of software failure, and SPUIFI code (software) that does not correctly change the database (that fails).

Further, as stated in the rejection of claim 6, it is Brodersen's rollback ability which is being used as evidence the claimed limitation was known in the art at the time of the invention, and as noted in the rejection of claim 1, Isip provides his own database checking (Isip col. 15, lines 21-25 'Applying the UPDATE statements ... provides an opportunity ... to verify that proper corrections have been made').

Accordingly the rejection of claims 6, 13 and 19 are maintained.

Applicant's arguments on pg. 20 filed 5/23/05, regarding claims 2-3, 9-10, and 15-16 have been fully considered but they are not persuasive.

Applicant's arguments depend on the patentability of claims 1, 8 and 14. As discussed above, the rejections to these claims have been maintained. Accordingly the rejections of claims 2-3, 9-10 and 15-16 are also maintained.

Applicant's arguments on pg. 20 filed 5/23/05, regarding added claim 21 have been considered but are moot in view of new grounds of rejection.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 7-8, 14 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,081,810 to Rosenzweig et al. (Rosenzweig).

Regarding Claims 1, 8 and 14: Isip discloses retrieving a SPUFI code that corresponds to the actual database (col. 14, lines 12-19 'generate the output file ... is executed using for example SPUFI'); testing the SPUFI code using an erroneous database (col. 15, lines 19-20 'the UPDATE statements are executed and operate upon ... the exception table'); determining whether the testing is successful (col. 15, lines 23-25 'verify that the proper corrections have been made'); and updating an actual

database, using the SPUFI code, based on the determining (col. 15, lines 25-27 'Once the user is satisfied ... the corrected rows can be inserted into the database table'), the updating creating an changed database.

Further Isip does not disclose copying the actual database in its entirety, the copying resulting in an erroneous database. However Isip does disclose copying the rows to be effected by the update (col. 14, lines 58-60 'creating a new exception table') storing the partial copy of the database as the erroneous database (col. 15, lines 19-20 'the UPDATE statements are executed and operate upon ... the exception table') wherein the storing is performed prior to the testing (col. 14, lines 54-56 'generated prior to each time a CHECK utility operates').

Rosenzweig teaches copying an actual database, the copying resulting in an erroneous database (col. 5, line 65-col. 6. line 3 'The entire database is maintained ... as a backup') in an analogous art for the purpose of protecting the data against corruption or loss (col. 5, line 65-col. 6. line 3 'as a backup to database 16 in the event malfunction ... causes a loss').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to create an erroneous database as taught in Isip (col. 14, lines 58-60 'exception table') which contains the entirety of the actual database as taught in Rosenzweig (col. 5, lines 65-66 'entire database') and execute the update query disclosed in Isip (col. 15, lines 19-20) on the erroneous database, if system resources were available to handle the extra processing and storage requirements.

The modification would have been obvious because one of ordinary skill in the art would have been motivated to provide the developer the opportunity to verify that the query performed correctly before updating the actual database (Isip col. 15, lines 21-25 'provides and opportunity ... to verify that proper corrections have been made') thereby protecting the data from loss or corruption as taught in Rosenzweig (col. 5, line 65-col.6, line 3 'acts as a backup').

Regarding Claim 7 and 20: The rejections of claims 1 and 14 are incorporated, respectively; further Isip discloses debugging the SPUFI code (col. 15, lines 16-19 'the user has made the desired corrections').

7. Claims 2, 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,081,810 to Rosenzweig et al. (Rosenzweig) in view of US 6,460,041B2 to Lloyd (Lloyd).

Regarding Claim 2, 9 and 15: The rejections of claims 1, 8 and 14 are incorporated, respectively; further neither Isip nor Rosenzweig discloses sending the SPUFI code to a staging area (col. 14, lines 12-19 'generate the output file'); but does not disclose requesting a database update to the actual database.

Lloyd teaches requesting a database update to the actual database (col. 9, lines 50-53 'the request is made ... and authority is granted') in an analogous art for the purpose of securing the data (col. 9, lines 22-24 'it may not be desirable that arbitrary users have access').

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It would have been obvious to a person of ordinary skill in the art at the time of the invention to require the updater to request and receive update access to the actual database, as taught in Lloyd (col. 9, lines 50-53 'the request is made ... and authority is granted') prior to running the SPUFI code disclosed in Isip (col. 15, lines 25-27 'Once the user is satisfied ... the corrected rows can be inserted into the database table') on the actual database, because one of ordinary skill in the art would have been motivated to protect the actual database from unauthorized change (col. 9, lines 22-24 'it may not be desirable that arbitrary users have access').

8. Claims 3, 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Isip (Isip) in view of US 6,081,810 to Rosenzweig et al. (Rosenzweig) in view of US 6,460,041B2 to Lloyd (Lloyd) as applied to claims 2, 9 and 15 above, and further in view of US 6,505,212B2 to Nakano et al. (Nakano).

Regarding Claims 3, 10 and 16: The rejections of claim 2, 9 and 15 are incorporated, respectively; further none of Isip, Rosenzweig, or Lloyd discloses locking the SPUFI code.

Nakano teaches locking code residing in a staging area (col. 20, lines 49-51 'creating a lock on item f') in an analogous art for the purpose of preventing version conflicts (col. 18, line 18 'a means to avoid conflicts').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the methods taught in Nakano (col. 20, lines 49-51) to lock the SPUFI code disclosed in Isip (col. 14, lines 12-19) because one of ordinary skill in the art would

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have been motivated to ensure that the code was not changed (col. 18, line 18) once it had been tested and verified as with the methods disclosed in Isip (col. 15, lines 23-25).

9. Claims 5, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,081,810 to Rosenzweig et al. (Rosenzweig) in view of US 5,592,618 to Micka et al. (Micka).

Regarding Claim 5, 12 and 18: The rejections of claims 1, 8 and 14 are incorporated, respectively; neither Isip nor Rosenzweig explicitly disclose that determining further comprises comparing an expected number of changes to an actual number of changes. However Isip does disclose that the user should verify the execution of the update statement (col. 15, lines 23-24 'opportunity for the user to verify that the proper corrections have been made').

Micka discloses registering a request record change quantity, the request record change quantity corresponding to a number of expected changed records (col. 10, lines 6-10 'a pseudo count field'); identifying an actual record change quantity, the actual record change quantity corresponding to a number of actual changed records (col. 10, lines 6-10 'assigns a number to each record set'); and comparing the request record change quantity to the actual record change quantity (col. 10, lines 6-10 'a number ... for indicating whether the entire record set has been read ... in conjunction with a pseudo count field') in an analogous art for the purpose of 'indicating whether the entire record set has been read' (col. 10, lines 6-10).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to use the record count comparison taught in Micka (col. 10, lines 6-10) as the verification method disclosed in Isip (col. 15, lines 23-24) because one of ordinary skill in the art would have been motivated to 'verify that the proper corrections have been made' (Isip col. 15, lines 23-24).

10. Claims 6, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,081,810 to Rosenzweig et al. (Rosenzweig) in view of US 6,446,089 to Brodersen et al. (Brodersen).

Regarding Claim 6, 13 and 19: The rejections of claims 1, 8 and 14 are incorporated, respectively; further neither Isip nor Rosenzweig discloses restoring the database after checking it for correctness.

Brodersen teaches checking the changed database for correctness (col. 8, lines 2-4 'in the event of ... software failure'); and restoring the actual database in response to the checking (col. 8, lines 2-4 'allow for rollback') in an analogous art for the purpose of repairing damage done to a database as a result of an update failure (col. 8, lines 2-4 'in the event of ... software failure').

It would have been obvious to a person of ordinary skill in the art at the time of the invention to include the rollback ability taught in Brodersen in the invention disclosed in Isip because one of ordinary skill in the art would have been motivated to repair any

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damage done to a database as a result of an update failure (col. 8, lines 2-4 'in the event of ... software failure').

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,189,010B1 to Isip (Isip) in view of US 6,081,810 to Rosenzweig et al. (Rosenzweig) in view of US 5,592,618 to Micka et al. (Micka) in view of US 6,446,089 to Brodersen et al. (Brodersen).

Regarding Claim 21: As stated on pg. 20 of Applicant's remarks filed 5/23/05 claim 21 is a combination of claims 1, 5 and 6 and is rejected with the same rational as those claims.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Mitchell whose telephone number is (571) 272-3728. The examiner can normally be reached on Monday-Thursday and alternate Fridays 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kakali Chaki can be reached on (571) 272-3719. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jason Mitchell
7/26/05



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SENIOR EXAMINER